Optimizing SEAL Selection

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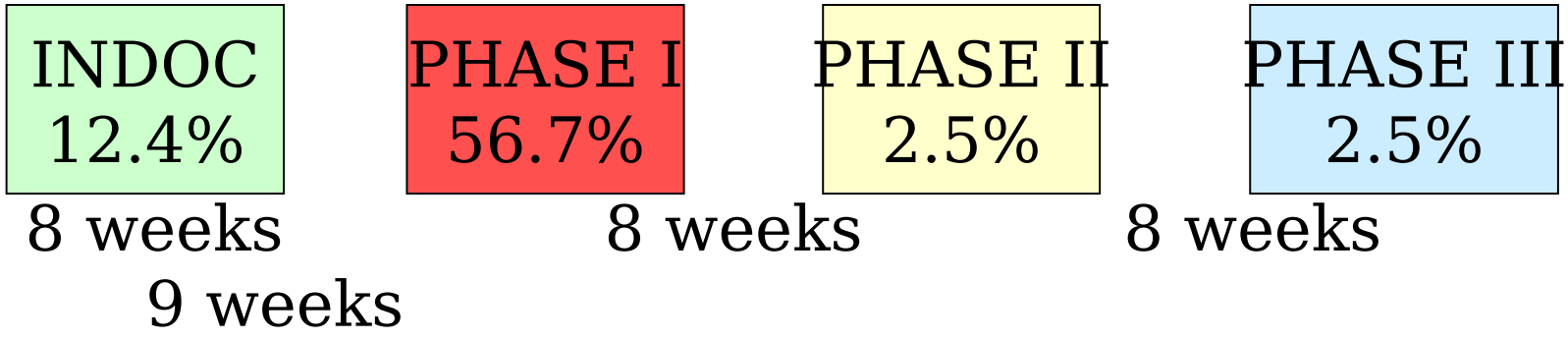
NSW Requirements Growth

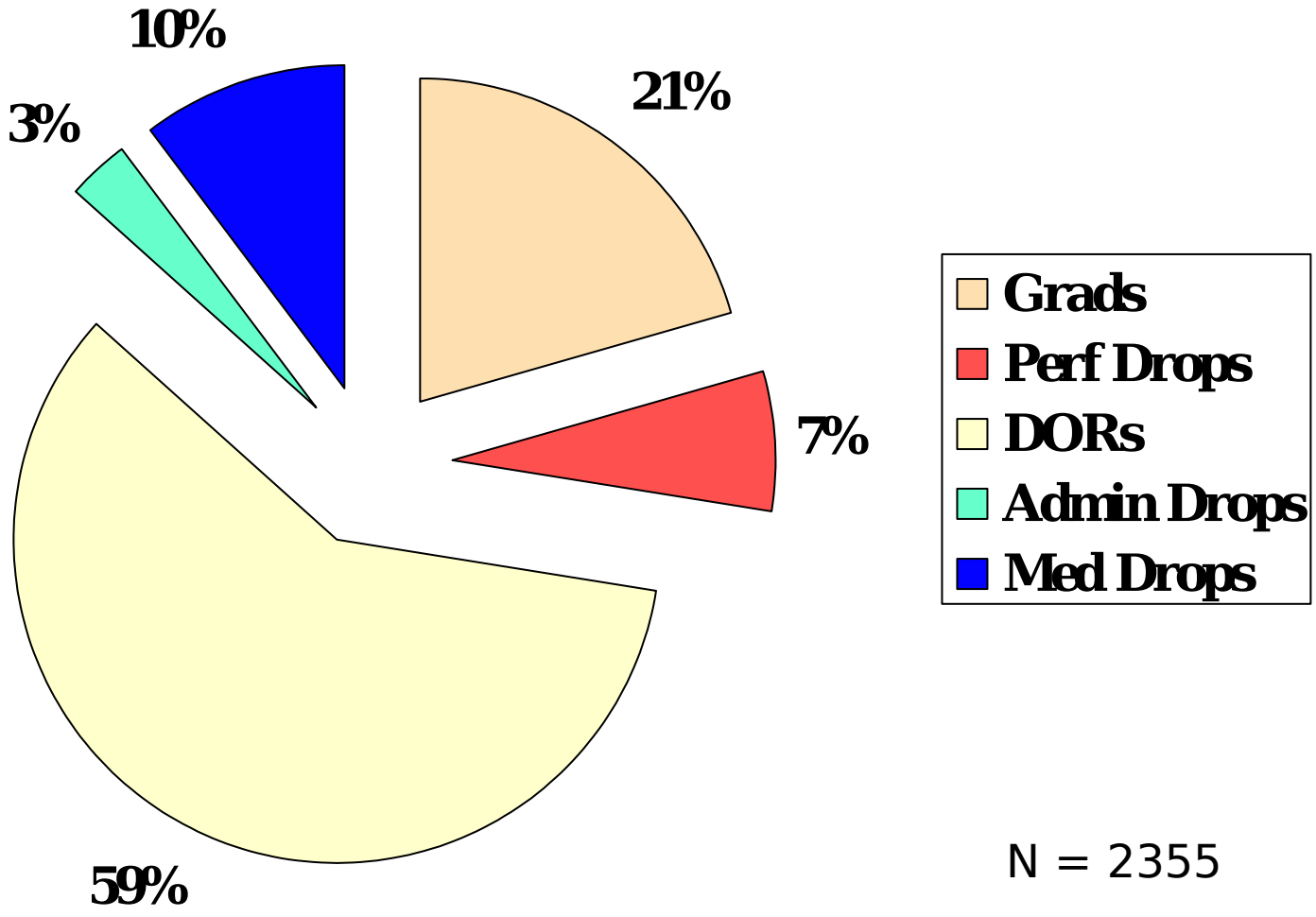
- **Requirements**
  - **Impact of Global War on Terrorism**
  - **Officer/Enlisted Requirements**
- **Growth plan**
  - **Plan to meet increased requirements by FY08**
  - **Accelerated plan to meet increased requirements by FY06**
- **Impact to NSW**
  - **Impact on officer/enlisted accessions**
  - **Changes necessary to implement growth**

BUD/S ATTRITION

- **BUD/S has historical enlisted attrition of 70%**
- **Training includes:**
  - **Indoc – pre training**
  - **Phase I – Basic conditioning / Hell Week**
  - **Phase II – Diving**
  - **Phase II – Land warfare**
- **Average attrition by training phase:**



SEAL Training Outcomes

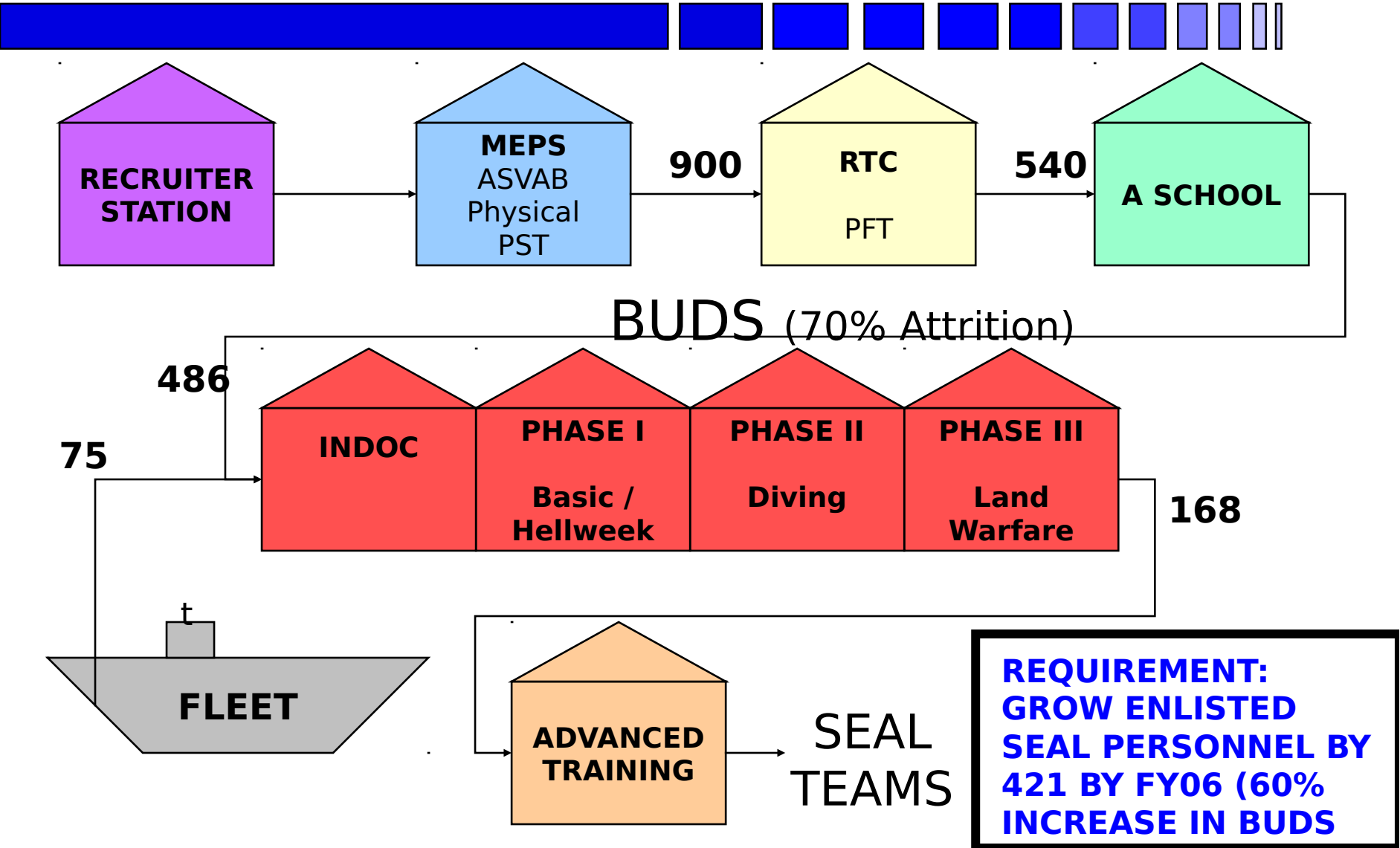


N = 2355

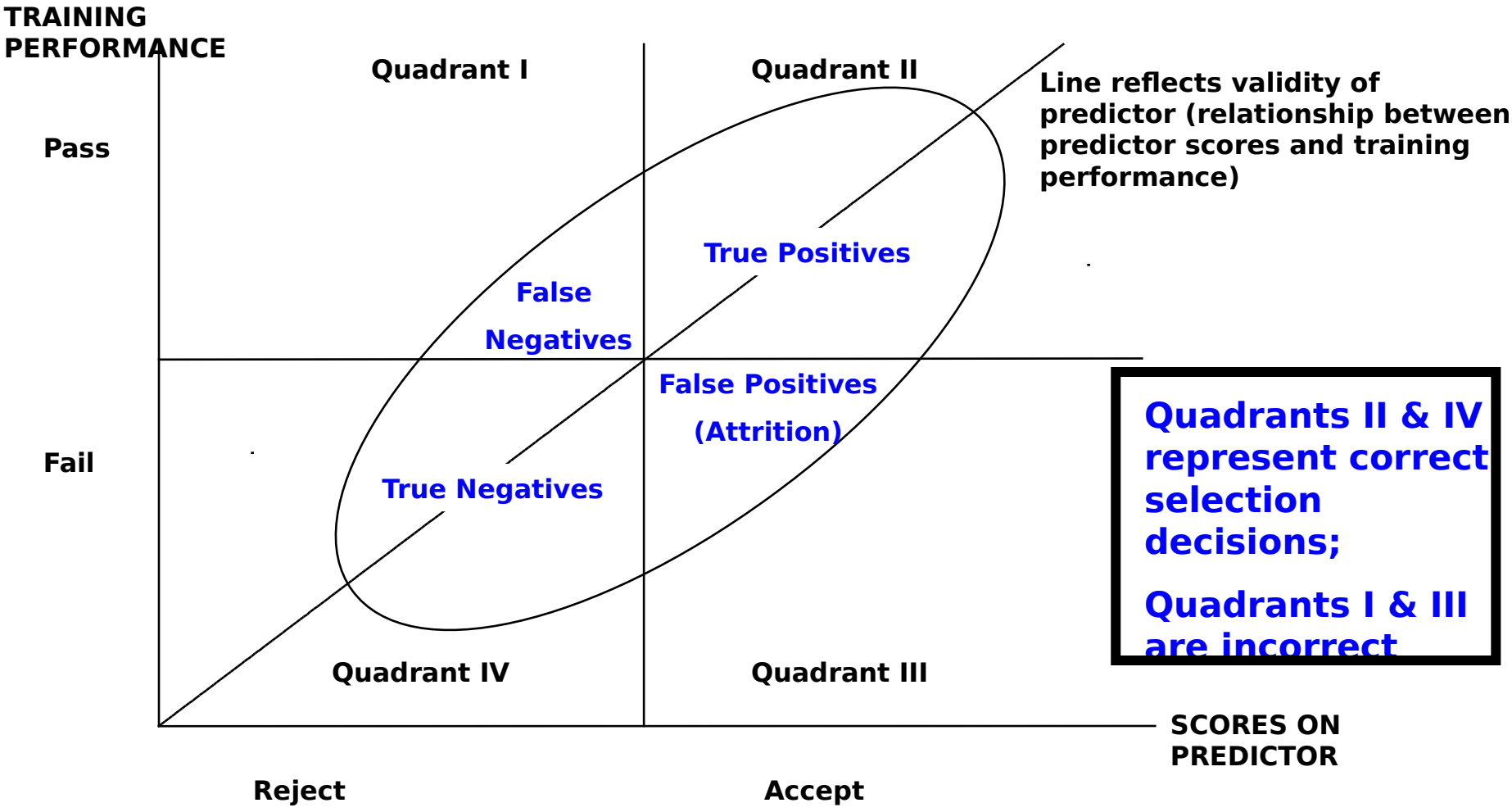
SEAL Selection Project

- **Requirement**
  - Grow SEAL enlisted personnel by 421 by FY06
- **S&C Strategy**
  - Comprehensive evaluation of SEAL selection
  - Goals
    - » Increase manning
    - » Reduce attrition
    - » Promote efficiency throughout pipeline
  - Short-term and long-term milestones
    - » Optimize current process and procedures
    - » Develop new predictors of training success
  - Establishing metrics to monitor effectiveness

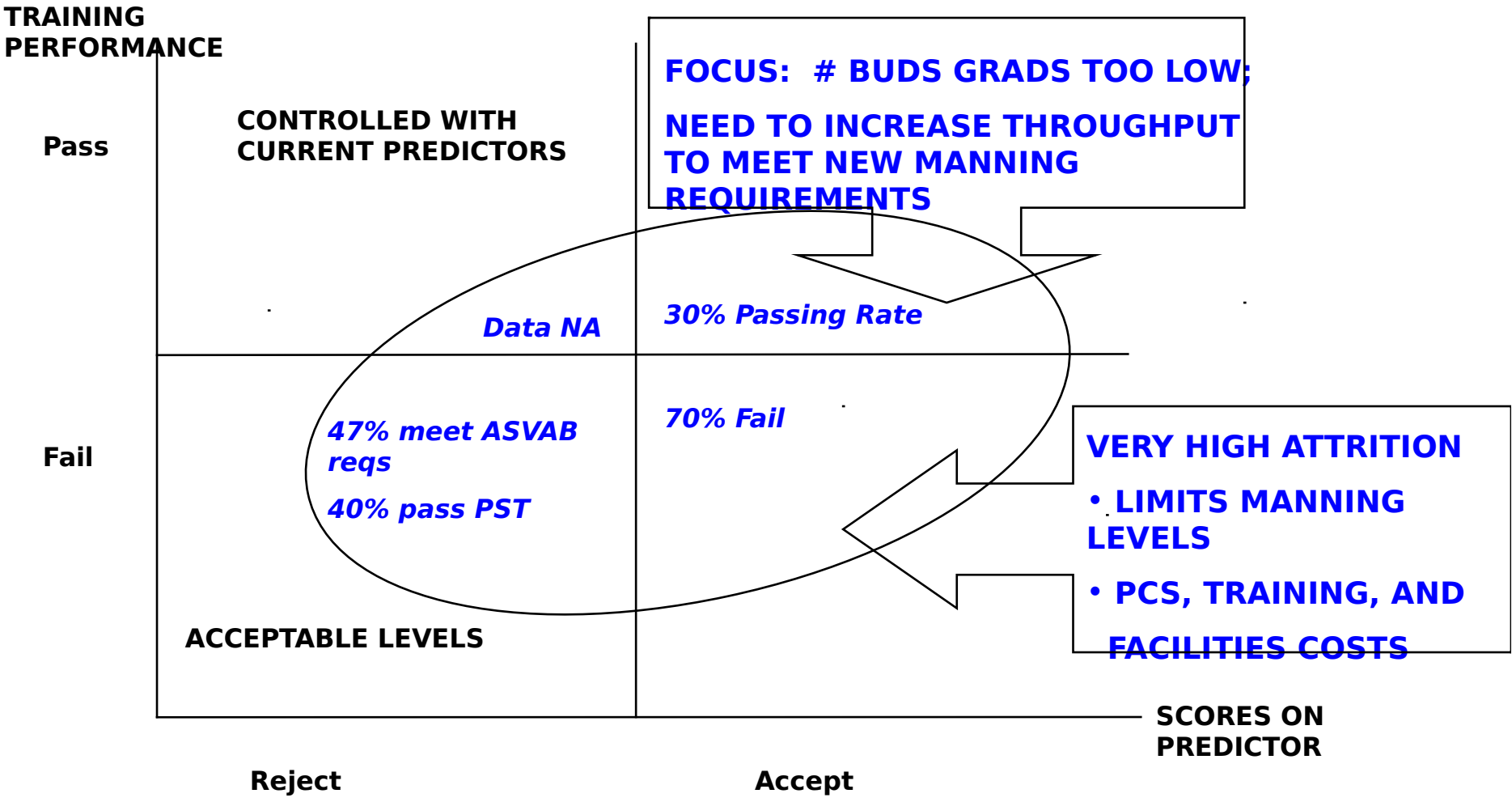
Current SEAL Enlisted Pipeline

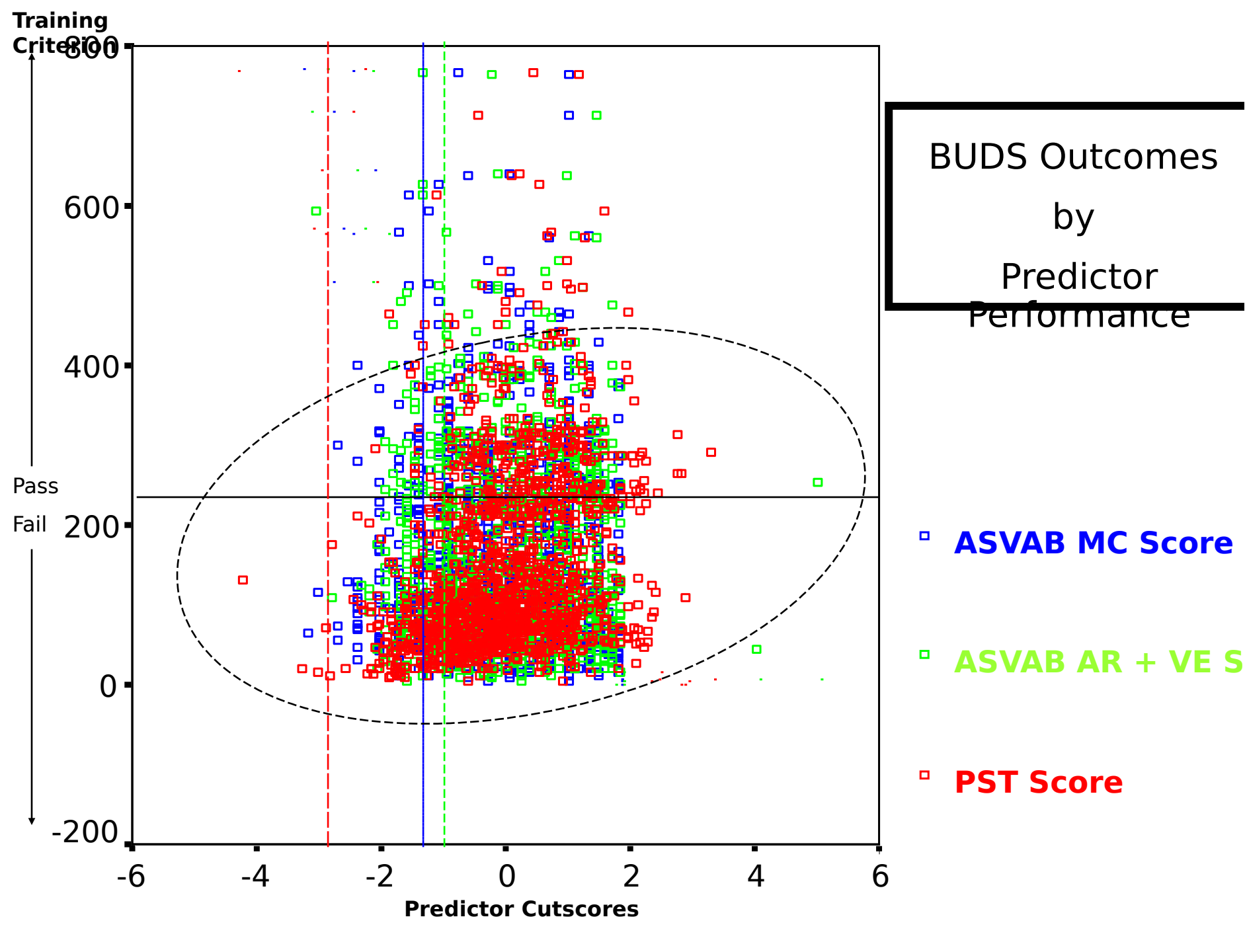


Selection System Diagnostic



SEALS Selection




Training Criterion
800
600
400
200
0
-200
Pass
Fail
-6
-4
-2
0
2
4
6
Predictor Cutscores
BUDS Outcomes by Predictor Performance
ASVAB MC Score
ASVAB AR + VE S
PST Score

Selection Variables

- **Base rate**
  - Proportion of candidates who could make it through the training without a selection measure
  - Reflects the training performance standard
  - SEALS have very low base rate (high performance standard)
  - FIXED VARIABLE: WILL MAINTAIN CURRENT PERFORMANCE STANDARD
- **Validity**
  - Relationship between predictor measures and training performance
  - Want to maximize
  - Current SEAL predictors have moderate validity
  - GOAL: INCREASE VALIDITY OF SEAL SCREENING
- **Selection ratio**
  - Number of people selected for training out of total number of candidates screened
  - Need adequate pool of candidates to screen
  - The lower the validity and the lower the base rate, the more candidates needed for screening
  - GOAL: INCREASE NUMBER OF CANDIDATES BEING SCREENED FOR SEALS

Increasing Validity

- **Current predictors of SEAL training success**
  - **Physical Fitness Test (PFT)**
    - » **Components**
      - **Swim (500 yds in 12:30 minute limit)**
      - **Pushups (42 minimum in 2 minutes)**
      - **Situps (50 minimum in 2 minutes)**
      - **Pullups (6 minimum, no time limit)**
      - **Run (1.5 miles in 11:30 minute limit)**
    - » **Demonstrates modest but significant correlation with training success**
    - » **Needs to be quantified for maximum predictive value**
    - » **Evaluate components to ensure appropriateness of standards**
    - » **Examine procedures for alignment with recruiting practices**

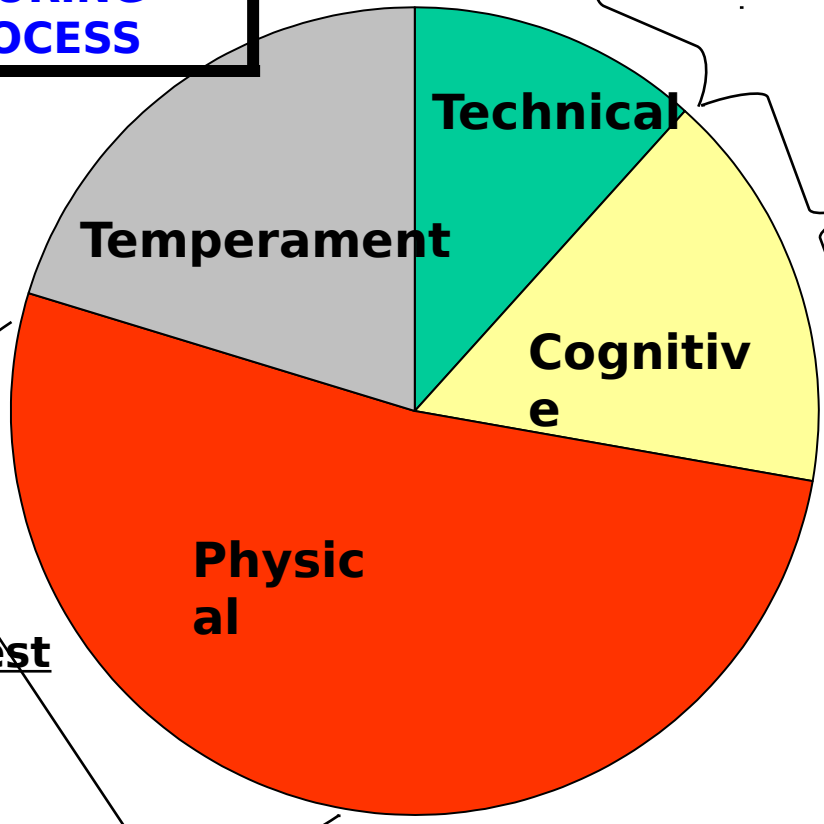
Increasing Validity (cont'd)

- ASVAB
  - » AR+VE $\geq$ 104 and MC $\geq$ 50
  - » Data show probabilities of training success decline below cutscores
  - » Test new composites
    - New subtest AO may predict land navigation
  - » Re-validate cutscore

- **Augment current screening measures to include tests of individual temperament / personality**
  - Attrition rate suggests important predictors of training success are missing

Predictors of BUDS Training Success

MAY NOT BE CAPTURING FULL RANGE OF PREDICTORS DURING SELECTION PROCESS



ASVAB
Mechanical Comprehension

ASVAB
Arithmetic Reasoning
Verbal Ability

Physical Fitness Test
Swim
Pushups
Situps
Pullups
Run

New Screening Test Development

- **Research stress & performance**
  - **Review studies**
  - **Perform quantitative synthesis of findings**
  - **Examine best practices**
    - **Other services**
    - **International groups**
- **Convene technical working group**
  - **Participants**
    - **S&C**
    - **SpecWar**
    - **NPRST**
    - **Aviation selection researcher**
    - **Army**

New Screening Test Development (cont'd)

- **Tasks**
  - **Identify predictors of SEAL training success**
  - **Select measures of predictors**
  - **Conduct pilot study**
    - **Concurrent**
    - **Predictive**
- **Develop final selection battery & administration procedures**
  - **Scoring instructions / procedures for ranking candidates**

Potential Predictors of SEAL Training Success

- **Interpersonal Skills**
  - Sociability .04-.30*
  - Leadership .06-.40*
- **Work Orientation**
  - Conscientiousness .08- -.34*
  - Motivation .22*-.39*
  - Self-Efficacy .18*-.22*
  - Attitudes towards Authority
  - Fitness Orientation .10-.45*
- **Psychological Adjustment**
  - Depression -.11*- -.19*
  - Negative Affect .10-.27
- **Resilience to stress**
  - Tolerance for Ambiguity .07-.34*
  - Hardiness

Figures represent ranges of correlations found in Special Forces research

* Indicates statistical significance

Modify Selection Ratio

- **Research factors related to SEAL interest**
  - **Demographics / background characteristics to inform recruiting efforts**
- **Expand pool using JOIN vocational interests tool**
  - **Provide systematic means for self-nomination**
  - **Interested applicants will be submitted for screening**

Jobs and Occupational Interest in the Navy - Microsoft Internet Explorer provided by EDS COE
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://localhost/joinasp/specialPgms.asp?
Go Links Customize Link

Jobs and Occupational Interest in the Navy

Navy Special Programs

Conduct missions in desert tactics and warfare

Infiltrate from the sea over the beach

Sea/Air/Land

SEAL

Perform missions requiring stealth and camouflage

Conduct insertion and extraction of teams using SEAL Delivery Vehicles (SDV)

Next

Done
Local intranet